

A review by the **Federal Reserve Bank of Chicago**

Business Conditions

1958 March



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**FEDERAL RESERVE BANK
OF CHICAGO**

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THE Trend OF BUSINESS

After a disappointing fall and winter, the economic landscape is being watched closely for signs of approaching spring — the first statistical robin. In mid-February, President Eisenhower suggested that March "should mark the beginning of the end of the downturn. . . ." He stated further "that it is the firm policy of the Government to foster recovery in every sound way." Meanwhile, tax cuts and a variety of other anti-recession measures to stimulate activity are being considered, should such action be deemed necessary.

The Chief Executive based his confidence largely upon recent and prospective steps taken by the Government to spur private and public construction, the generally easier credit conditions now prevailing and a strong upsurge in defense orders. The last point was of greatest interest to the hard goods industries which have borne the brunt of the recent decline in production. Major procurement contracts for military hardware, which amounted to 5.7 billion dollars in the last half of 1957, are expected to bound upward to 9.7 billion dollars in the January-June period of 1958.

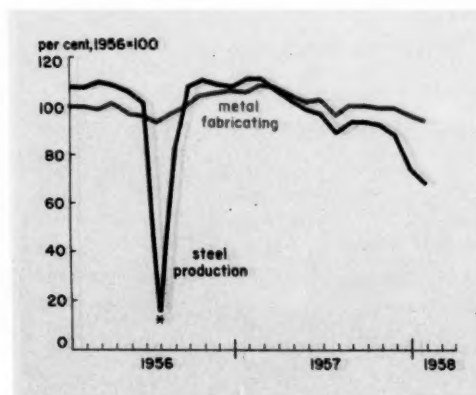
Seasonal trends point upward

There is ample reason for expecting an improvement in the months ahead on the basis of normal seasonal movements in activity. Of course, at least a seasonal rise would be necessary to show that the nadir of the slump has been passed.

Over-all employment typically hits its low for the year in January and February and then begins a gradual uptrend to midsummer. Unemployment in February typically runs 17 per cent above the average for the year. This ratio usually drops off by about 5 per cent in March and continues to fall markedly in April and May prior to the entrance of June graduates into the labor market.

Between the first and second quarters of the year, personal consumption expenditures usually rise by 5 per cent, new construction by about 15 per cent and over-all spending by approximately 2 per cent. Among the

Steel production falls faster than use since early 1957, suggesting inventory decline



* Production curtailed by strike.

major components of activity, only inventory investment ordinarily declines between the first and second quarters.

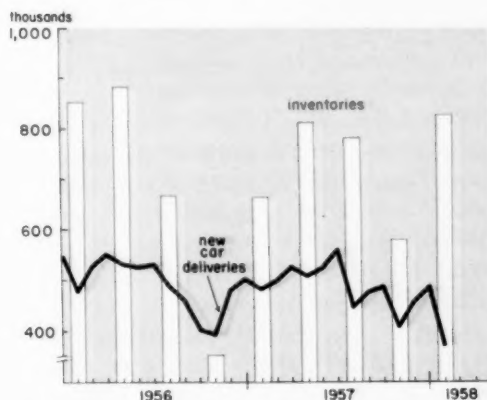
Inventories usually rise at an annual rate of 8 to 10 billion dollars in the January-March period. The other quarters typically see some degree of liquidation. Although stock-reducing sales are widespread in early January, retailers are preparing to build their stocks for the spring trade. Construction materials are being stock-piled in preparation for warmer weather, and dealer holdings of farm machinery, road building equipment, automobiles and other items normally are being replenished in preparation for an expected seasonal upswing in customer takings.

It is apparent that inventories have not been rising at anything like a normal rate so far in 1958. Inventory liquidation at the manufacturing level was proceeding at a rate considerably in excess of normal toward the end of 1957, but sales were declining even faster. Retailers were indicating a reluctance to stock up early in the new year, despite the fact that final demand was being maintained fairly well.

The dollar volume of construction activity in January was maintained at the December rate and was 3 per cent above last year. On the basis of preliminary information, total retail sales in that month are believed to have equaled or slightly bettered the excellent December showing. In December and January, following the autumn slump, seasonally adjusted retail sales had climbed back almost to the record level of the third quarter. Federal, state and local government outlays increased slightly in the fourth quarter of 1957 and are expected to rise further.

Up-to-date information on inventory developments is not readily available, but trends can be inferred from other data. In January, weekly production of steel averaged

Car inventories mount as sales decline



Note: New car deliveries data are adjusted for trading days.

SOURCE: Ward's Automotive Reports.

1.5 million tons, 40 per cent below 1957. This was a much greater drop than the decline in activity of steel-using industries. Midwest department stores reported the value of goods on order to be 14 per cent below last year. Production of building materials and textiles also appeared to be below current usage. As most businesses attempted to reduce stocks, the situation in automobiles appeared unique. Dealer holdings of passenger cars were in the neighborhood of 825,000 — equal to more than two months of sales at the reduced January rate.

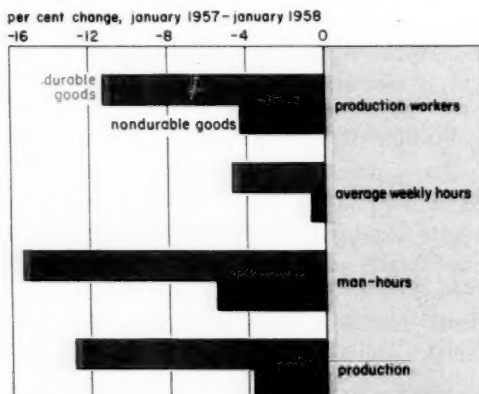
Will income erosion hit retailers?

The general drive to reduce inventories, along with declines in production of producers' equipment and defense hardware, were largely responsible for the declines in employment and personal income which continued unchecked from September through January. In the latter month, nonfarm employment, adjusted for seasonal movement,

was 1,100,000 below August, and 760,000 below January 1957. Manufacturing jobs alone were off 860,000 from August and 1,100,000 from a year ago. Nonmanufacturing employment, therefore, was still 320,000 above last year in January, although a quarter of a million below the peak August level. About four-fifths of the decline in manufacturing has occurred in durable goods lines.

Despite rising wage rates, weekly paychecks of those who who have retained their jobs in manufacturing have declined in the past year, because of the shortening of the average work week. In addition, dividends have been cut back in some cases, commissions have been harder to earn, and profits of unincorporated enterprises have been under competitive pressure. As a result, earned personal income has declined faster than unemployment compensation and other transfer payments have risen.

Hard goods manufacturing leads employment and output declines



Unemployment claims rise sharply (initial claims, first five weeks)

	1950	1954	1957	1958	Per cent change 1957-58
	(thousands)				
U. S.	2,452	2,755	2,182	3,440	+ 58
Illinois	128	132	96	167	+ 74
Indiana	50	86	60	117	+ 94
Iowa	17	20	17	23	+ 39
Michigan . . .	119	147	89	220	+148
Wisconsin . .	25	39	30	47	+ 59

Thus, buying power has weakened and could account for some cutback in consumer buying. A much more important factor in reducing these purchases could be the development of an adverse psychology on the part of individuals whose income has been maintained. The 4.5 million estimate of unemployment for January and layoffs at particular plants have been publicized widely.

In the early weeks of 1958, new unemployment insurance claims were sharply ahead of the same period in 1957. With the exception of Iowa, all District states report an increase in unemployment claims equal to or substantially in excess of the national rise. This fact may help to explain why department store sales in the four weeks ending February 22 trailed the 1957 figures by 11 per cent in the Midwest, in contrast to a more modest decline nationally.

Consumers have been downgrading purchases, reversing a long-term tendency, and appear more reluctant to utilize credit to finance a large volume of expenditures. Nevertheless, merchants who have pushed promotions of sale merchandise in recent weeks often have found gratifying response.

Accounts receivable lending— credit at the margin

Financial institutions and credit practices are constantly being adapted to service borrowers' needs more effectively. This flexibility is particularly important in the case of marginal business loans in which the adequacy of collateral plays a major role.

Any firm which does not sell on strictly cash terms generates receivables which represent the obligations of its customers. When sales expand, there is a tendency for receivables to grow at the expense of cash, inventory and, in time, fixed assets. If receivables are not converted into cash with sufficient rapidity, the selling firm may exhaust its credit and find its expansion potential severely limited.

At this point the firm appears "undercapitalized," judged by conservative lending standards. But additional equity capital may be available only at a cost which the owners consider prohibitive in terms of sharing earnings and control with outsiders. One answer to the problem may be secured short-term credit. In many cases the very receivables which are choking off further growth may be the most suitable collateral available.

A self-liquidating security

Receivables which arise out of sales to customers in a sound condition will be paid off in the normal course of business. But until that point, which may be several months away, receivables are, in a sense, frozen assets. A more vigorous attempt to collect from customers may require either

terms of sale so short as to hamper the competitive position of the firm or the use of costly cash discounts.

A firm's receivables usually include the obligations of a considerable number of customers who may be in differing lines of business, thereby providing diversified security for a loan. Moreover, a firm's customers, on the average, may be in a stronger financial position than the firm itself. As a recent pamphlet of the American Bankers Association states, "Many banks have suddenly realized that the best, and certainly the most liquid, collateral that a borrower has to offer is a portfolio of well diversified self-liquidating, current receivables. . . ."

Commercial banks often engage in lending on assigned accounts receivable. Loans of this type are also offered by a lesser known group of specialized institutions, the commercial finance companies.

Wholesalers of credit

Commercial finance companies are middlemen in the financial structure. Like sales finance companies, they borrow from the commercial banks and the capital markets and make the funds available to other borrowers. The commercial finance companies lend to business firms engaged in production or distribution of goods and services whose access to primary sources of credit is limited. Typically, the clients of commercial finance companies are those small, growing or temporarily hard-pressed firms which figure prominently in any discussion of financ-

ing problems of undercapitalized or under-financed business enterprise.

The larger, well-established commercial finance companies are able to keep basic money costs at a minimum. They borrow from commercial banks at the prime rate and obtain funds in the capital markets in competition with large industrial firms. In addition, some of the very large companies, which also operate in the consumer credit field, are able to tap the commercial paper markets at low rates.

At the end of 1956, outstanding commercial loans of all types held by finance companies exceeded 1 billion dollars, equal to about 3 per cent of the business loans outstanding at commercial banks. In the two years, 1955 and 1956, commercial finance company credits rose by 50 per cent, a somewhat greater expansion than for commercial bank business loans. Moreover, the 1 billion of outstandings, assuming a turnover of about ten times a year, indicates total business sales financed in this manner in the neighborhood of 10 billion dollars.

In recent years, commercial finance companies have expanded their operations sharply. New firms have entered the field, and existing organizations have added to their capital by increasing equity funds and by selling long-term debt. When these firms expand their capital base, total resources are increased by a multiple of this amount, since bank borrowings, commercial paper and un-subordinated debt can be incurred to the extent of two or three times the capital including equity and subordinated debentures.

Types of lending

The great bulk of the business lending done by commercial finance companies falls into three classes: (1) accounts receivable financing, which involves the purchase or

discounting of receivables generated by firms selling goods and services; (2) other secured lending on inventory, chattels or even real estate; and (3) time sales financing of equipment. The emphasis in this article is upon the first type, the financing of open book accounts which represent continuing shipments of goods to customers and which do not involve instalment notes. Brief descriptions of the other credit services offered by commercial finance companies are provided in the accompanying box.

Methods of operation

Accounts receivable can be converted into cash before maturity in two ways. They can be sold outright, without recourse, to a "factor," or they can be used as collateral for advances from a finance company or a bank. In essence, these devices accomplish much the same purpose and, indeed, both forms are used by a number of companies. But the methods are quite different.

The old-line factor concentrates his attention more upon the financial position of his client's customers, as distinguished from the net worth and solvency of the client himself. This is because he approves the credit before shipment is made and accepts full risk of loss on the resulting receivables. The possibility of substantial returns and allowances sometimes can be handled by advancing less than the full face value of the invoices.

Factoring charges are made up of two components. First, there is a commission charge on all receivables purchased. This usually runs between 1 and 3 per cent, depending upon such considerations as the credit standing of the obligor, the total volume of business, the average size of invoice and the average maturity of the receivables. In addition, there is an interest charge,

Other types of finance company lending

Time sales financing is a highly competitive type of lending widely available from banks and manufacturers and their finance subsidiaries, as well as from commercial finance companies. This financing process is similar to that typically used for passenger automobiles. Purchasers of construction machinery, trucks, trailers and other equipment often buy on time sales contracts.

Inventories usually are far less satisfactory security for loans than receivables or equipment. This is because of the sharp price concessions which often are required in the event of forced liquidation. As a result, a loan on inventory is likely to be restricted to a relatively small portion of the cost of the merchandise. Commercial finance companies do make a substantial volume of inventory loans but, almost invariably, this service is offered only as a part of an over-all

program of finance for a client. For example, a manufacturer of seasonal merchandise may borrow on inventory until goods are shipped and accounts receivable are generated.

Chattel mortgages on equipment granted by commercial finance companies may arise out of the purchase of the equipment itself. The more usual chattel mortgage loan, however, is a secured loan for general working capital purposes. Numerous small finance companies specialize in this type of loan. The amount loaned on equipment in use is ordinarily restricted to its liquidation value. Specialized appraisers are consulted as to the probable value of the equipment "under the hammer," that is, at a fast liquidation, and also the value in an "orderly liquidation." Usually the former determines the maximum loan value.

usually 6 or 7 per cent per annum, on funds advanced before the calculated "average due date" on the receivables acquired.

Because of the services performed by the factor, it is difficult to compute an "effective interest rate" so that the cost of this credit service may be compared with other types of financing. Some firms using factors do not take up funds before the due date and so incur no interest charge. Moreover, funds left with the factor after maturity typically draw interest at the same rate charged to borrowers.

Historically, factoring has been associated with the textile industry at the processor stage. In the past thirty years, the device has expanded into a variety of other lines, including finished clothing, furniture, shoes, plastics, toys and a host of other items. However, the great bulk, perhaps 90 per cent, of the accounts factored involve textiles.

It would appear that factoring might be

an ideal solution to the credit problems of many small firms. It not only provides funds, but also relieves the management of much of its concern over credit and collection problems and allows concentration on sales and production. Nevertheless, relatively little old-line factoring is done in the Midwest. Most of the firms which include the word "factor" in their name do little if any true factoring in the sense defined above. Although the few firms which are engaged in the straight factoring business in this area have been expanding their operations, there are a number of obstacles to a widespread use of the device.

First, there is the problem of notification. Since the receivables become the property of the factor, the customer must know who holds his account and where payment is to be made. Many sellers of goods believe that their customers would object to accounts being assigned to a third party. Such a practice might suggest a shaky financial

position or it could interfere with the flexibility of the seller-buyer relationship.

Second, credits on shipments must be approved by the factor *before* goods are shipped. Otherwise, the client must accept the credit risk himself. Every attempt is made to speed the process of checking credits, but it is apparent that the firm which factors its accounts is at somewhat of a disadvantage in seeking new business, since sales to new accounts must be made subject to a credit check.

Third, many types of business do not generate accounts which are easily factored. This is the case whenever goods are shipped on consignment, where returns are likely to be quite large, or where average invoice size is very small. Receivables of service organizations, for the most part, are difficult to factor because the product is intangible and the nature of the receivable is less certain than in the case of goods. Construction firm receivables introduce the problem of mechanics' liens and the possibility of non-performance on the part of contractors.

Fourth, some finance companies have found factoring unprofitable unless a sufficiently large number of clients can be serviced in a given field, and the same credit information can be used for more than one account.

Nonnotification financing

Accounts receivable lending with recourse to the borrower is often called "non-notification" financing because the purchaser of the goods usually is not informed that his obligation has been assigned to another party.

When a nonnotification deal is arranged, the lender agrees to advance a certain proportion of the face value of the accounts assigned. This proportion may range between 50 and 90 per cent of the value, but usually averages around 75 to 80 per cent. The proportion depends upon the credit standing of the clients, the financial strength of the borrower, the possibility of returns and allowances, and the cash and trade discounts which are permitted. Usually the

Trade acceptances—prelude to accounts receivable financing

Prior to the Civil War, shipments of goods from manufacturers to merchants were accompanied commonly by drafts drawn by the seller upon the purchaser. This instrument was then "accepted" by the purchaser after receipt and approval of the goods and returned to the shipper who could then discount the obligation with a lender. After the war, the practice fell into disuse in favor of open book credit, partly, because of the reduction in the length of terms of trade and, partly, because the device reduced the flexibility of the seller-buyer relationship. As a result, trade acceptances are rarely used today in domestic transactions.

In the early years of the Federal Reserve System, there was an attempt to revive the trade acceptance. Since these instruments represented "self-liquidating," two-name paper and would tend to rise and fall in volume with the needs of trade, trade acceptances were made eligible for rediscounting at the Federal Reserve Banks.

The trade acceptance technique differs from nonnotification accounts receivable financing chiefly in that a negotiable instrument evidences the debt, and in the fact that the purchaser of the goods recognizes that his debt is likely to be assigned to a third party.

ratio provides for an advance which is no higher than the cost of the goods to the seller.

Payments by customers are sent to the client, but he forwards these checks to the lender for deposit. The lender endorses the checks in code and credits the client's debt with the amount received. If individual invoices are not paid at maturity or by the expiration of an agreed upon period past the due date, they must be repurchased by the borrower.

Rates are often cited as a fraction of one per cent per day. Thus, $1/25$ of 1 per cent per day is equal to about 15 per cent per annum. But rates are also quoted on a per month or per annum basis. The lowest rate charged by finance companies in this area on new business at the present time is about 13 per cent per annum. However, business often is done at 18 to 24 per cent and rates sometimes run even higher. Additional service charges such as charges for audits are also made in some cases.

In comparing these rates with typical bank charges, it should be kept in mind that accounts receivable financing involves no minimum deposit balance and that collections are credited against outstandings shortly after receipt so that interest is charged only for the days that funds are actually in use by the borrower. The operation is somewhat similar to the overdraft system used by banks in certain British Commonwealth nations.

Checking up on clients

Institutions lending on receivables take a number of precautions to protect themselves against losses. First, it is ascertained that a valid assignment of accounts has been made which will be honored in case of bankruptcy. Second, the percentage of the invoice ad-

vanced in cash is held to a point which permits a reasonable margin of safety to cover returns and allowances. Third, over-age accounts are held in a special collateral account or returned to the borrower and exchanged for fresh obligations. Fourth, the lender attempts to assure himself that the receivables are, in fact, the obligations that they purport to be. Fifth, the lender keeps a watchful eye on the borrower's over-all business conduct to minimize the risk of failure. These "policing" procedures account for the largest share of the expense of receivables lending on a nonnotification basis.

The National Commercial Finance Conference, the industry's trade association, provides a forum for the interchange of ideas and information with regard to financing techniques and the cooperative prevention of fraud. The prudent conduct of this type of financing requires a continuous checking of individual transactions and the over-all condition of borrowers.

Invoices, purchase orders, evidences of shipment and receipt are examined; individual accounts are continuously sampled and verified using the stationery of a public accounting firm. Finally, surprise audits of the client's books are made frequently, at least every three months. This information helps the lender guard against fraud and improper practices such as excessive cash withdrawals, inventory speculation or lax accounting procedures. The detailed view of the borrower's business that results may also provide the basis for constructive management advice.

Client characteristics

The larger commercial finance companies including the big sales finance companies, which do a commercial finance business,

often have branch offices and conduct operations which are national in scope. Subsidiaries may be acquired or created to handle special types of lending or to enable the companies to operate in certain states.

Nevertheless, access to nonnotification accounts receivable financing may be difficult for a smaller firm located a considerable distance from the major business centers. The need to make periodic calls upon clients can easily involve prohibitive expense in the case of small accounts. As in the case of other types of lending operations, large receivables loans can be handled more cheaply in proportion to size than small ones.

The lowest rates charged by large commercial finance companies pertain to clients selling 300,000 to 400,000 dollars of goods annually, at the very least. Those companies which charge only one rate usually will not accept new clients who are not expected to generate business volume of this magnitude. Business firms producing a smaller volume of receivables must seek out or be directed to smaller finance companies.

As finance companies grow and attract larger clients they often raise their cutoff points on size and reduce their charges, even during periods of rising interest rates.

Accounts receivable lending by banks

Commercial banks have made loans on open book receivables for more than fifty years. However, it was not until the Thirties that banks resorted to this kind of loan in large numbers. In part, this development stemmed from a desire to bolster the holdings of earning assets during a period of depressed business activity and, in part, from an enhanced desire to obtain adequately secured new loans.

Banks which engage in accounts receiv-

able financing almost always use the non-notification method. There are, however, a few banks which do a factoring business.

Most big city banks will make receivables loans under certain circumstances. A few banks, moreover, have specially trained personnel to handle such lending. Their methods of operation are similar to those of the finance companies. The cost of this type of credit, therefore, usually is higher than that on other bank loans. The effective rate may reflect a service charge similar to a factoring commission.

Even in large cities there are many bankers who believe accounts receivable lending is not a suitable activity for a commercial bank. However, the number seems to have diminished. Banks commonly lend to commercial finance companies and sometimes participate with them in specified credits. During 1957, the Credit Policy Commission of the American Bankers Association issued a booklet entitled, "Accounts Receivable Financing," explaining the techniques for making receivables loans.

Will it pay?

Justification for the expense of either factoring or nonnotification accounts receivable financing is found in the effect upon the profits of the client. Aside from the saving in credit and collection expense, the client

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may be enabled to take cash discounts which he had previously passed up. Borrowing from a supplier on typical 2/10 net 30 terms means that the customer is, in effect, paying 2 per cent for twenty days credit—an effective rate of over 36 per cent per annum. Perhaps more important, however, is the opportunity for a client to expand his volume on a small capital base.

Interest charges of any kind have two main components. These are (1) the pure interest rate, which can be represented by the yields on Government securities, and (2) the compensation to the lender for exposure to risk. The last can be further divided into expected actual losses and the expense incurred to avoid loss.

The much broader spectrum of interest rates charged by finance companies, as compared with other lenders, is related largely to the expense incurred to avoid loss. Because of the existence of institutions such as commercial finance companies, funds are available to most business borrowers at *some* rate. Aside from the problems of borrower integrity and the possibility of a completely hopeless situation, there is no reason for an interest rate cutoff point on business lending if the cost can be justified on the basis of the borrower's earning potential.

In states where usury laws apply to both corporate and noncorporate business, accounts receivable financing is not done in the nonrecourse form. In such cases, finance companies may resort to outright purchase of the receivables, i.e., factoring, a process not subject to these laws.

Usury laws, nevertheless, limit the expansion of receivables lending. This is particularly true in the case of sole proprietorships and partnerships whose owners may have reasons for not converting to the corporate form.

Another obstacle to accounts receivable financing is present in states where there is legal uncertainty surrounding the making of valid, unequivocal assignments. This is often troublesome when buyers and sellers are located in different states. Even if legal problems do not prevent receivables financing, commercial banks may be deterred from entering the field and costs of doing business may be increased.

A steady flow of funds

Accounts receivable financing permits undercapitalized business firms to obtain funds on a continuing basis. This money remains available so long as a firm is able to sell goods to customers whose financial standing is sufficiently strong. Ordinary bank loans also are often employed on a fairly permanent basis, if the lender is willing to constantly renew the credit.

The distinction between short- and long-term credit, therefore, is not clear cut. Nevertheless, it is often maintained that there is an unsatisfied need for longer-term loans on the part of smaller firms which are unable to place bonds in the capital markets.

Long-term loans on real estate or equipment are generally obtainable. In the absence of such collateral, a request for longer-term money must relate to term loans or debentures, instruments employed by firms with excellent credit ratings. Negotiation of unsecured intermediate- or long-term credit ordinarily is preceded by a number of years of successful operation. A relatively new firm or one that is growing rapidly typically faces a highly uncertain future. Injection of long-term funds into situations such as these involves a degree of risk which is usually associated with ownership capital.

Accounts receivable financing may enable

a firm to increase its profits by generating a larger volume of sales on its capital investment. These additional earnings can be added to the net worth. Eventually such an enterprise may qualify for unsecured bank credit. Finance companies expect to lose

their more successful clients to the banks in the course of time, and banks which initiate a customer relationship on the security of receivables look forward to the time when the firm's financial position will justify the extension of unsecured credit.

Another look at the money supply

The nation's money supply — as measured by checking accounts and currency holdings of the public — totaled 132.9 billion dollars on a seasonally adjusted basis at the end of December 1957. This was the lowest level in almost two years and was more than a billion dollars under the November figure. To those who regard money supply as a "lead indicator" of business activity, this fact may have appeared of critical importance.

The money supply and the nature of its relation to economic activity are favorite sparring grounds for economists. Although the controversy has never been resolved in terms of a workable formula for the maintenance of an optimum volume of money, there is general agreement that too much money leads to inflation and too little tends to stifle economic activity. It is the responsibility of the Federal Reserve, as the nation's monetary authority, to steer a careful course between these economic Scylla and Charybdis.

How fast should the money supply expand to support the much-to-be-desired full production and employment? The postwar years have seen a rise of 35 per cent in the money held in the pockets and checking accounts of the public — or an average of roughly 3 per cent per annum as measured by year-end

levels. Nevertheless, this was not a regular growth — in only three years did the actual rise approximate 3 per cent. The fastest growth was 7.5 per cent in 1946. Some contraction occurred in 1948 and 1949, but there was no net decline again until 1957. The contraction last year followed an increase of only 1 per cent in 1956.

The money concept

Since the major function of money is to facilitate the flow of goods and services, the simplest expectation might be that the private money supply would grow in proportion to the volume of work it has to do. One approximation of the latter is the private gross national product. Yet, as is apparent from the chart, money supply has grown more slowly than non-Government GNP in almost every postwar year.

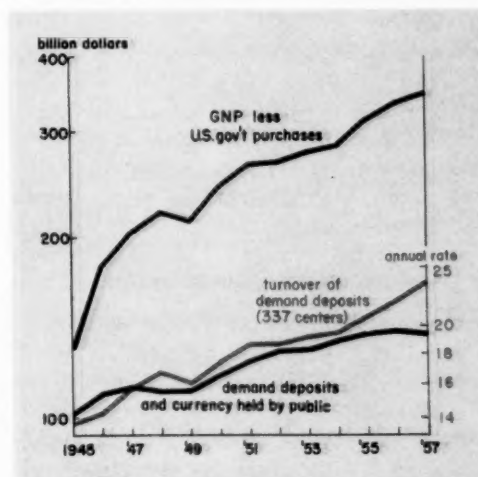
There is, of course, another variable — the intensity with which the stock of money is used. This has risen rapidly, particularly over the past three years. After reaching a peak last summer, however, the velocity of money appears to have slowed, and it is this development which has aroused renewed interest in the adequacy of the money stock itself.

While the volume of money admittedly plays a crucial role in the operation of the economy, its behavior is frequently difficult to interpret. Moreover, misleading conclusions often result from unprecise use of the "money supply" concept and from a lack of awareness of its limitations. Money is usually defined as currency outside banks and demand deposit balances of businesses and individuals. These are the most liquid assets of the public — those which can be spent directly and are generally acceptable in payment for goods and services.

Although this concept has probably been the most satisfactory over long periods of time, it has certain shortcomings which must be recognized in interpreting the short-run behavior of the measure. Some of these are related to the substantial seasonal swings in the demand for money. Seasonal adjustment factors are changed periodically, but there are some quirks that cannot be corrected by the adjustment which may produce strange gyrations in the series. For example, seasonally adjusted demand deposits for December 1957 (based on December 25 as the last Wednesday of the month) showed a drop of 1.1 billion dollars from the last Wednesday of November. Yet it is estimated that these deposits rose about 1 billion in the six days between December 25 and December 31. Thus, the seasonally adjusted series clearly understates the year-end money supply and requires qualification for use in economic analysis.

An even more basic shortcoming of the definition is its limited inclusiveness. Much difference of opinion has existed as to just what types of assets should be considered money. Time deposits conventionally have been excluded on the theory that they must be converted into currency or checking accounts before they can be spent, but to their

Money use has grown faster than money supply in financing private expenditures



owners they undoubtedly perform, in part, one of the functions of money — a liquid reserve — as do various other kinds of "near moneys." At best, the line between money and non-monetary liquid assets is arbitrary. To whatever extent the public alters its preference as to the form in which liquid balances are held, any limited coverage series will be unrepresentative.

Time vs. demand

Some economists would argue that publicly held time deposits belong in the money supply. Regardless of one's views on this for the long run, the sizable shift in the composition of deposits during 1957 cannot be ignored. Time accounts held by businesses and individuals in commercial and mutual savings banks rose more than 8 per cent, or 7 billion dollars last year, compared with 4 billion in 1956. Timed as it was with wide-

spread increases in rates paid on savings deposits, there is little doubt that the growth in these accounts was in part at the expense of demand balances. Balances switched to time accounts need be regarded as no less liquid by their owners, since banks in practice repay such balances upon demand and draw upon the same common pool of bank assets to finance either type of deposit repayment. Nonetheless, this shift has automatically resulted in a contraction of the money supply as conventionally defined.

Bank reserves as an index

If the Federal Reserve System controls the money supply and does so via its influence on the reserves of the commercial banks, can we not then look to bank reserves as a substitute for a direct measurement of money supply and thus avoid the conceptual difficulties? Unfortunately, we cannot. The problem here is that equivalent reserve changes may result in quite different monetary effects, depending on (1) the extent to which the reserves are used, (2) the distribution of reserves between types of banks and (3) the public's changing preference for the various forms of money.

The accompanying diagram shows the range of change in the volume of currency and deposits which could result from a 100 million dollar expansion in bank reserves under various assumptions as to its use at present reserve requirements. If all were paid out as currency, there could be no further monetary expansion. At the other extreme, these reserves could support 2 billion dollars of time deposits, although none of this would be part of money supply as defined above. Alternatively, from roughly \$500 million to \$870 million of demand deposits could be created, depending upon which class of bank held the deposits. Actually, of course, some

combination of these alternatives is most likely to result and, thus the final expansion potential would lie somewhere between the two extremes. Based on the present distribution of reserves, the rise in total deposits and currency would be about \$375 million per \$100 million of reserves injected. If none went into currency, the additional reserves would support approximately a sixfold demand deposit expansion.

Fast or slow dollars

As implied earlier, our real concern with changes in money stock is in their effects in encouraging or limiting total spending. Suppose each of two men has a balance of \$100 in his checking account at the beginning and end of the month. But the first man has written no checks while the second has used up and replaced his balance three times in the interim. Both of these deposits count equally in the stock of money, but are very different in the amount of spending which they implement. Obviously, it is futile to attempt to measure the adequacy of money stock *per se* unless its rate of use — so-called velocity or turnover — can be assumed to be constant. This we know is unrealistic.

But if conceptual and mechanical difficulties plague us in measuring money stocks, they are tenfold more complex in the attempt to measure its rate of use. At best, our knowledge of the turnover of deposits is limited and we know nothing of the speed with which pocket money travels. Because the bulk of transactions are settled by check, however, we can get some idea of the velocity of the larger part of the money supply — demand deposits — by comparing debits to checking accounts with end-of-month balances.

Deposit balances of businesses and individuals at a sample of banks in 337 centers outside major financial cities were used an

average of 23 times in 1957, compared with 20 times in 1955 and 14 times 10 years earlier. Financial centers are omitted from this money turnover series because of their large volume of financial transactions. Purchases and sales of investments and credit operations of the financial institutions in these centers make turnover exceptionally high and not necessarily parallel to spending rates for goods and services. On the other hand, almost no data are available on the use of balances at banks in small communities, where turnover is certain to be lower than in urban centers.

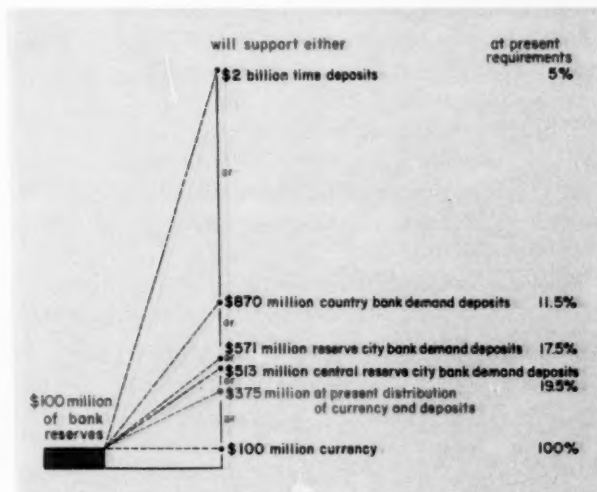
To the extent that cash balances are used more intensively, smaller amounts are sufficient to support a given amount of activity; that is, the work-doing capacity of each dollar is expanded. Both businesses and individuals tend to increase their spending, relative to their cash balances, in periods when business is good and there is widespread confidence that income will be rising. They become more interested in using money as a medium of exchange and less interested in using it as a storehouse of purchasing power.

Money—use and control

To stay abreast of this changing employment of money, the monetary authorities must continually review the combined effect of money supply and velocity on the volume of spending. Thus, it was in light of the rising rate of turnover during 1956 and 1957 that the growth in money stock was held below average.

Restraints on money growth, in their turn,

A wide range of effects can result from the addition of \$100 million to bank reserves



induce renewed consideration of ways of economizing money holdings. Those individuals and businesses who feel they must have more money offer higher interest rates in order to acquire it, and depositors with still-idle cash are enticed by the higher available returns to give up some of their cash in exchange for interest-bearing assets. These kinds of actions add further to the rate of turnover of money, and from one point of view they may appear to circumvent the restraint sought by a tight rein upon the money supply. But such actions also serve to spread the influence of restrained monetary growth, and thereby to provide some of the comprehensiveness and adaptability which are valued attributes of monetary policy.

This chain of actions tends to work conversely in a business downswing, such as began to develop in the fall of last year.

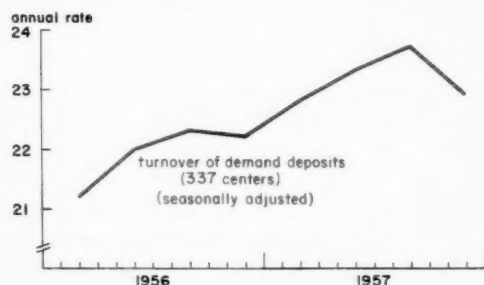
Although 1957 as a whole showed a sharp rise in turnover, a marked slowing was evident in the last quarter of the year and in January some further drop in deposit activity occurred.

Can such a decline be compensated for by enhancing money stocks? The volume of demand deposits and currency could dip despite easy monetary policy, if loan demand diminishes and outstanding private credit is repaid faster than public credit increases

Growth in "cash" balances in the past two years has been chiefly in time accounts



but checking accounts have been used more intensively



during a business slowdown. Though it behooves the Federal Reserve to see that sufficient reserves are available to support a larger amount of pocket and check money, with adequate allowance for the fact that balances are becoming less active, this easing effect does not necessarily appear in a larger dollar total of money. The active money supply will not increase unless these added reserves are used, and unless the public has sufficient interest in money as a circulating medium as distinct from a store of value to hold any resultant deposit increases in demand rather than time form.

Any interpretation of changes in money supply and its effects on total spending must take into account imperfections in the measuring device, as well as variations in the concept to be measured. Furthermore, it must make allowance for the effects of changes in money velocity — whatever the shortcomings of our speedometer for this purpose. As of now, although the statistics indicate a much smaller than normal growth in the public's checking balances and currency, there is not necessarily a dearth of money. Cash balances have continued to rise, but have been accumulating chiefly in time accounts. Moreover, with rising security prices "near moneys" such as marketable bonds have come to approach money more closely than when liquidation involves substantial losses.

In these circumstances, the effects of an accelerated expansion in bank reserves (or money potential) could be expected in large part to result in further bank purchases of Government securities from individuals and businesses in exchange for additional cash balances. In the statistics, such public swapping of liquid assets for still more liquid cash would appear as a further slowdown in money velocity.

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